

Claims

1. A high temperature treating method for inflators for an air bag, comprising:

a step of cutting and removing wire harnesses connected for inflator activation;

a step of performing grouping according to main metals constituting inflators; and

a step of charging the inflators which have been subjected to treatment in the preceding steps into a thermally treating tower to conduct thermal treatment at a temperature at which gas generating materials inside the inflators burn and the main metals constituting inflators do not melt.

2. A high temperature treating method for inflators for an air bag according to claim 1, further comprising a step of removing plastic parts prior to the step of conducting heating treatment.

3. A high temperature treating method for inflators for an air bag according to claim 1, further comprising a step of performing grouping according to the shapes of the inflators prior to the step of conducting thermal treatment.

4. A high temperature treating method for inflators for an air bag according to claim 3, wherein the shapes of the inflators are disk-shaped or cylinder-shaped.

5. A high temperature treating method for inflators for an air bag according to claim 4, wherein, when the shapes of the inflators are cylinder-shaped, the inflators are grouped

to either of a pyrotechnic inflator and a hybrid-type inflator.

6. A high temperature treating method for inflators for an air bag according to claim 1 or 2, wherein the main metals constituting inflators are aluminum, iron or stainless steel constituting outer shell containers of the inflators.

7. A high temperature treating method for inflators for an air bag according to claim 1 or 2, comprising, in the following order;

(A) step of cutting and removing wire harnesses connected for inflator actuation,

(B) step of removing a plastic part,

(C) step of performing grouping according to main metals constituting inflators to receive the inflators in a receiving box as occasion demand,

(D) step of performing grouping according to the shapes of the inflators to receive the inflators in a receiving box as needed, and

(E) step of charging the inflators which have been subjected to treatment in the preceding steps into a thermally treating tower to conduct thermal treatment at a temperature at a temperature which gas generating materials inside the inflators burn and the main metals constituting inflators do not melt.

8. A high temperature treating method for inflators for an air bag according to claim 7, wherein, in the (C) and (D) steps, the inflators are grouped using both of the main metal constituting an inflator and the shape thereof as selection

references to receive inflators having identical metals and shapes in the same receiving box.

9. A high temperature treating method for inflators for an air bag according to claim 1 or 7, wherein the treatment in the step preceding to the thermal treatment step or reservation of the inflators before treatment is conducted in an indoor facility provided with a lightning rod.

10. A high temperature treating method for inflators for an air bag according to claim 1 or 7, wherein the step of conducting thermal treatment is a step of conducting charging treatment of the inflators after the temperature inside the thermally treating tower is elevated up to a temperature at which the gas generating materials inside the inflators burn and main metals constituting an inflator do not melt, and

after inflator charging, or after the last inflator charging when divisionally charging inflators plural times, the temperature is maintained for a time of 1 to 100 times a time required to terminate treatment of the inflator.

11. A high temperature treating method for inflators for an air bag according to claim 10, wherein, after inflator charging, or after the last inflator charging when divisionally charging inflators plural times, the temperature is maintained for a time of 3 to 30 times a time required to terminate treatment of the inflator.

12. A high temperature treating method for inflators for an air bag according to claim 1 or 7, wherein the inflators are treated using a thermal treatment equipment provided with a

thermally treating tower, an inflator charging apparatus to the thermally treating tower, a heating apparatus inside the thermally treating tower, and a cooling apparatus of a gas exhausted from the thermally treating tower.

13. A method for recovering metals constituting inflators after the treatment conducted by the high temperature treating method for inflators for an air bag according to claim 1 or 7, wherein

the method comprising a step of cooling the interior of the thermally treating tower, after the step of conducting thermal treatment is terminated, and melting the inflators after the inflators are taken out.

14. A metal recovering method for inflators for an air bag according to claim 13, comprising a step of cutting the inflators prior to the step of melting the inflators.

15. A metal recovering method for inflators for an air bag according to claim 14, wherein the inflator-cutting step is applied to an inflator having outer shell container with an apparently sealed structure or with a structure in which water is easily entered or stayed inside the inflator.